

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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CHAIM LERMAN, JAMES VORASSI, AND
ROSLYN WILLIAMS, Individually, and on behalf of
others similarly situated,

Plaintiffs,

15 CV 7381 (SJ) (LB)

-against-

MEMORANDUM &
ORDER

APPLE INC.,

Defendant.

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JOHNSON, Senior District Judge:

Plaintiffs Chaim Lerman, Roslyn Williams, and James Vorrasi (“Plaintiffs”), individually and on behalf of all class members similarly situated as defined herein, bring this action against Defendant Apple Inc., (“Apple” or “Defendant”) for deceptive trade practices and false advertising in violation of New York General Business Law (“NYGBL”) §§ 349 and 350 and the New Jersey Consumer Fraud Act (“NJCFA”), N.J.S.A. §§ 56:8-1, et seq. Plaintiffs allege that they were deceived by Apple into downloading iOS 9, an iPhone software, which diminished the functionality and value of their iPhone 4S¹ devices. They claim that Apple knew that iOS 9 would significantly degrade the iPhone

¹ The parties and experts refer to the product as both the “iPhone 4S” and “iPhone 4s”. For consistency, the Court will adopt the language primarily used by Apple and refer to the product as the “iPhone 4S”.

4S's performance but failed to disclose such effect and actively misrepresented iOS 9 to iPhone 4S users.

Presently before this Court is Plaintiffs' Motion for Class Certification, Appointment of Class Representatives, and Appointment of Class Counsel pursuant to Federal Rule of Civil Procedure Rule 23(a), 23(b)(2), and 23(b)(3). Additionally, both parties move to preclude opposing expert witness opinions and testimony related to the Motion for Class Certification. Based on the parties' submissions, oral argument, and the reasons stated below, all four Motions in Limine to Preclude Expert Opinions and Testimony are DENIED and Plaintiffs' Motion for Class Certification is GRANTED under Rule 23(b)(3).

I. Background

Plaintiffs claim that they were deceived into downloading iOS 9, an Apple operating system, which "significantly slowed down their iPhones and interfered with the normal usage of the device." (Dkt. No. 94-2, 6-7.) Plaintiffs claim they were made to believe that iOS 9 was either necessary to the continued security and operation of their devices or that it would improve their devices' operation. They claim that Apple knew from its internal testing that iOS 9 would degrade the performance of iPhone 4S devices. Yet, allegedly, Apple not only failed to inform iPhone 4S users of this eventuality, but also actively marketed iOS 9 to them, directly notifying each user that iOS 9 was available for download and continually prompting them to download iOS 9 until they did so. (Dkt. No. 94-2, 3.)

When Plaintiffs followed the notifications to download the first version of iOS 9, they were led to a download screen that stated the following:

With this update your iPhone, iPad and iTouch [will] become more intelligent and proactive with powerful search and improved Siri features . . . And, built in apps become more powerful with detailed transit information in Maps, a redesigned Notes app, and an all-new News app. And improvement at the foundation of the operating system enhance performance; improve security and give you up to an hour of extra battery life.

(Dkt. No. 30-2, Ex. 5.) According to Apple, this software description appeared for one week following the release of iOS 9.0—a time period in which █ percent of the class downloaded the software. (Dkt. No. 95-2, 5.) Eleven subsequent iterations of iOS 9 were released, each with its own description. (*Id.*) Each class member downloaded at least one of these versions of iOS 9. Plaintiffs claim that the entire putative class “relied on Apple’s misleading statements and/or advertisements (including omissions) in updating to iOS 9 with the fair and reasonable expectation of receiving equal or better performance and/or new features and functionality.” (Dkt. No. 18, ¶ 57.)

Plaintiffs submit two reports by expert witnesses in support of class certification. The first, by Dr. Scott Nettles, presents a methodology to show that iOS 9 did slow the operation of iPhone 4S devices. The other, by Dr. Groehn, presents a methodology to measure the value of the alleged defect to consumers. Both experts applied their methodology with the understanding that their analyses will be refined at the merits stage should class certification be granted. Apple seeks to preclude both experts from offering their opinions and testimony in their entirety. A summary of each report follows.

A. Nettles Report

Dr. Nettles is a computer scientist with a PhD from Carnegie Mellon University and has held professorships at several universities, including a tenured position at the University of Texas's Department of Electrical and Computer Engineering. He has four decades of experience in the field of experimental computer science and spent much of his career researching computer system performance.

Dr. Nettles' report seeks to answer the following questions:

(a) how iOS 9 performance compares to the performance of prior iOS versions—and of iOS 7 and 8 specifically—on the iPhone 4S and (b) if it is possible to determine based on common evidence applicable to all iPhone 4S users—including Plaintiffs—whether they share a common experience as to the effect of iOS 9 on the iPhone 4S.

(Dkt. No. 94-2, Ex. M at ¶ 7.) Dr. Nettles concluded that, based on the evidence he reviewed, “the iOS 9 Slowdown exists and is widespread in its impact.” (*Id.* at ¶ 18.) He found that the slowdown “occurs whatever pre-iOS 9 version is the starting point of the upgrade and also whatever iOS 9 version is the ending point,” and that no subsequent versions of iOS 9 corrected the slowdown. (*Id.*) This conclusion is based on what Dr. Nettles deems a “pilot performance evaluation,” which can be scaled up at the merits stage of litigation to show common proof of a class-wide injury. (*Id.* at ¶ 19.)

Dr. Nettles bases his conclusion primarily on Apple's internal reports and data sets turned over in discovery and his own independent testing. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

(*Id.* at ¶ 74.)

Dr. Nettles analyzed [REDACTED] “how all versions of iOS 9 could be expected to perform on the iPhone 4S in comparison to all versions of iOS 7 and 8.” (*Id.*) Essentially, Dr. Nettles analyzed this data by comparing performance test results that were measured in time (seconds) from pre-iOS 9 versions to the various iOS 9 versions. [REDACTED]

[REDACTED]

(*Id.* at ¶ 84.)

Dr. Nettles then compared the iOS versions by calculating various statistical metrics for the remaining tests, “such as mean, median, mode, minimum, maximum, and standard deviation for all versions of iOS 7, all versions of iOS 8, and all versions of iOS 9...” (*Id.* at ¶ 85.) Dr. Nettles analysis included extensive application-specific review, filtering for tests entries “where the difference in median values for iOS 9 versions compared to the median values for pre-iOS 9 versions is larger than 0.25 seconds.” (*Id.* at ¶ 88.) Dr. Nettles chose 0.25 seconds as the cutoff because it is “clearly above the threshold of detection by a user.” (*Id.* at ¶ 87.) Dr. Nettles filtered for results that showed both

² Within each main iOS Version (*e.g.*, iOS 8.0), there are multiple iterations of that software released (*e.g.*, iOS 8.3 or iOS 8.4.1) prior to the next main iOS Version (*e.g.*, iOS 9.0).

slowdowns and speedups in the iOS 9 versions. Dr. Nettles explains three reasons for his conclusion that the evidence of slowdowns is more significant than that of speedups:

First, the evidence of slowdowns is more widespread and pervasive in terms of the number of slowdowns, the degree of slowdowns, and (based on the names of Apple's performance tests) the apparent importance of operations that contain these slowdowns. Second, the Plaintiffs in this action complained of slowdowns on their iPhone 4S devices after they downloaded iOS 9. They did not discuss whether other operations might have sped up. That comports with how an ordinary consumer experiences the performance of a smartphone. It makes sense that a consumer would care more about performance degradations that render a device frustratingly slow, or worse, than performance improvements that add marginal improvements to a device's performance. Third, given the performance baselines observed in pre-iOS 9 versions, small and insignificant performance improvements have a disproportionate impact on performance measurements. For example, if an operation took one second in pre-iOS 9 versions and slowed down by half a second in iOS 9, that means that the operation in iOS 9 performs at one-and-a-half times the speed that it did in pre-iOS 9. On the other hand, if that same operation speeds up by the same half a second in iOS 9, that means that it performs twice as fast in iOS 9 as it did in pre-iOS 9 version. This mathematical feature makes speedups sound more significant than they actually are in comparison to slowdowns of the same amount.

(Dkt. 94-4, ¶ 105.)

The only applications tested were "native applications," (i.e. those that were developed by Apple and come pre-installed on iPhones) such as messaging, FaceTime, email, etc. (*Id.* at ¶ 64.) Dr. Nettles considered this a conservative approach because native applications are developed in-house and thereby optimized to "best utilize underlying system resources" compared to applications developed by third parties. (*Id.*) The implication is that third-party applications would perform worse than native applications in general and thereby may be more susceptible to the alleged slowdown.

Though he distilled and evaluated various metrics, Dr. Nettles presents his [REDACTED] findings primarily through median values because, he explains, medians are less sensitive to outliers. [REDACTED]

[REDACTED] Dr. Nettles explains his decision for doing so is accepted in the field and aligns with a methodology that he developed as part of his dissertation work with a colleague at MIT, in response to shortcomings he saw in the use of traditional methods in experimental computer science, and has continued to refine throughout his career. (*Id.* at 37.)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

(*Id.* at ¶ 80.)

[REDACTED]

[REDACTED]

[REDACTED] To address this shortcoming, Dr. Nettles conducted his own testing of the iPhone 4S “on high level tasks that a user might perform when using an app (such as scrolling, launching, and switching between user

interface (UI) panes) and across a range of apps that are in common use (such as Safari, Apple Email, and iMessages).” (*Id.*) Dr. Nettles independent testing methodology involved “defin[ing] a number of benchmarks and metrics, [running] them on different version of iOS, and then compar[ing] the results.” (*Id.* at ¶ 145.)

Dr. Nettles states that this round of his own testing should be viewed as “an experiment to demonstrate the feasibility of, and to refine, further testing.” (*Id.* at ¶ 144.)

[REDACTED]

[REDACTED]

[REDACTED]

While Dr. Nettles plans to do further testing at the merits stage to crystalize his findings, he found that “these results are so widespread that they cannot be merely a statistical fluke, but rather, reflect an underlying problem with iOS 9 on the iPhone 4S.” (*Id.* at ¶ 172.)

The expansions and refinements of his own testing at the merits stage would include: repeating individual measurements to take advantage of statistical analysis,

[REDACTED] and expanding the number of applications tested, including third-party applications if possible. (*Id.* at ¶¶ 252-254.) Dr.

Nettles also states that his analysis [REDACTED] can be further refined through additional discovery. For example, obtaining additional information as to the exact processes [REDACTED] (*Id.* at ¶ 250.)

Dr. Nettles also reviewed additional discovery from Apple and found that they were consistent with his findings:

- **iOS Bug Reports:** [REDACTED]
[REDACTED] Dr. Nettles found that these reports “do not show that any of the significant performance degradations that [he] observed [REDACTED] were resolved prior to the release of any version of iOS 9.” (*Id.* at ¶ 80.)
- **iOS Beta Tests:** Apple’s internal documents that reflect the results of trials that allowed users to download and use iOS 9 prior to its public release.
[REDACTED]
- **Apple Customer Complaints:** Apple’s internal records of complaints made by iPhone 4S owners that downloaded iOS 9. Dr. Nettles cited customer complaints that comported with his findings as well as multiple instances of Apple representatives informing customers that the iOS 9 was not designed to run on the iPhone 4S’s older hardware and encouraging them to upgrade to newer iPhones.

B. Groehn Report

Plaintiffs retained Dr. Groehn to serve as their damages expert and provide a model for calculating class-wide damages at the certification stage. Dr. Groehn is a PhD economist, a Director at Berkeley Research Group, and has over 25 years of experience analyzing consumer markets. Groehn’s report largely focuses on conjoint analysis—a widely used method in market research with a variety of applications—to measure class-wide damages. The report also briefly offers two replacement cost theories and refers to the statutory damages available under NYGBL. Groehn describes conjoint analysis as follows:

Conjoint Analysis is based on the economic theory that demand for a particular product is driven by features embodied in that product. Conjoint Analysis applies a set of a set of econometric and statistical techniques that have been developed to study consumers’ decision-making processes, determining trade-offs between products, features, and price, as well as quantifying consumers’ gains and/or losses of utility when choosing between different alternatives.

(Dkt. No. 94-4, ¶ 47.) Groehn states that he chose to use conjoint analysis over other methodologies because it “is ideally suited to model the demand for products in different configurations and the implicit price of attributes that cannot be observed in the market....” (*Id.*) Dr. Groehn states that his methodology can be further refined and repeated after receiving the results of Nettles’ expanded testing at the merits stage.

Groehn’s conjoint analysis finds that “iOS 9 Slowdown,” as defined by Dr. Nettles, caused iPhone 4S owners 8.7% of purchase price in damages for those that purchased their phone over two years prior and 9.7% for those who purchased their phones 4 years prior. While these figures appear counterintuitive, Groehn reports the difference is not statistically significant and incorporates the lower figure into his final damages calculation. (*Id.* at ¶¶ 102, 111.) The measurement is the supposed difference in what consumers are willing to pay for a phone with and without the alleged slowdown. To calculate this percentage, Groehn first conducted a pilot survey to determine which smartphone attributes were most important to consumers. He then conducted a second survey that required participants to indicate preferences among hypothetical phone descriptions with varying levels of these most desired attributes. The hypothetical device either contained or did not contain the alleged slowdown. Groehn then analyzed the data through software to compare what individuals were willing to pay for otherwise identical devices with and without the slowdown as described by Dr. Nettles. (Dkt. No. 94-4, ¶ 91.)

Groehn’s pilot survey was distributed to 500 participants that had all purchased an iPhone in the last eight years. Each person was given a list of 16 smartphone attributes and asked to identify which were important to them. They were then asked in a follow

up question to assign points, totaling 100, to each attribute to measure their relative importance. Among the available options, survey takers ranked the following as their top eight choices in descending order: brand, price, battery life, reliability, camera, size, memory capacity, and screen size. (Dkt. No. 94-4, ¶ 29.)

Groehn explained that best practice in conjoint analysis requires limiting a survey to two to six attributes, with between two and five levels within that attribute. (*Id.* at ¶ 71.) Thus, he chose to include the attributes most important to consumers with two exceptions: brand and reliability. While brand was the most important attribute among pilot survey takers, Groehn did not include it because the “conjoint survey will target iPhone users and therefore the brand will not be varied” (*Id.* at ¶ 71.) “Reliability,” the fourth most important feature, was also excluded because it is “not independent of the defect” and difficult to measure objectively (*Id.*)

The second survey was completed by 1000 participants. Each participant received a summary description of the device attributes as follows:

Attribute	Description
Battery Life	A common measure of battery life is talk time – how long could one speak on the phone before the battery runs out. Here we offer 15h/20h or 25h.
Camera	Cameras come in different resolutions, which describe the number of pixels in a photo. Here we offer 10, 12 or 18 megapixels (MP).
Screen size	Smartphones have become popular in two different sizes. Here we offer 5.8 inches and 6.5 inches. Accounting for the difference in width, the bigger screen is 20% bigger.

Memory capacity	The phone's memory is used to store photos, emails and other data. Here we offer 64 Giga Byte (GB), 128GB and 256GB.
Updates: The manufacturer is known to regularly update the operating system for some time after release of the smartphone. While these updates are voluntary and recommended, they cannot be undone once installed.	<p>Two or four years after purchase you will receive the final update to the operating system.</p> <p>After updating the phone, the phone may maintain performance or you may see incremental improvements, including additional smart features, better camera performance, and certain operations in some apps become faster.</p> <p>However, if there are improvements, there may also be a group of apps negatively impacted by an issue with the update. Regular users of these impacted apps (for example Messages, Phone, Safari, Camera, Contacts, FaceTime) will experience slowdowns in 3 or more key operations (for example loading, scrolling, pane switching) of at least 50% relative to the previous version of the operating system.</p>
Price	\$600/\$650/\$700/\$750/\$800

(Dkt. No. 94-4, Table 6) (emphasis in original). The “update” attribute is intended to measure the defect at issue in the case and was formulated based on Nettles’ description of his findings. (*Id.* at ¶ 73.)

Following the summary description, each respondent reviewed a screen with five randomly generated hypothetical devices that had varying levels of each attribute.³ Participants were asked to consider the five devices, select their preference, and then

³ For example, one hypothetical device may have offered 15h battery life, a 10 MP camera, 5.8 inch screen size, 256 GB memory capacity, the slowdown as described above, and cost \$750.

indicate whether they would actually buy the hypothetical device. (*Id.* at ¶ 86.) They repeated this process twelve times.

The raw data was then analyzed using Sawtooth, “a software widely used in the analysis of conjoint surveys,” according to Groehn. (*Id.* at ¶ 90.) Groehn’s analysis breaks down how much specific attributes and their levels drive an individual’s willingness to pay for a particular choice set. Once these separate components are discerned, “the individual part-worths by attribute level can be combined to estimate the share of respondents who would have purchased a particular choice set or product at a specific price.” (*Id.* at ¶ 96.) Groehn then compares respondents’ willingness to pay for products that are identical except for the existence of the slowdown. The five attributes in combination with the five price points in both the actual world (where the defect is not known) and but-for world (where the defect is known prior to purchase), yield 3,240 possible estimates for the value of the alleged slowdown. (*Id.* at ¶ 98.)

II. Daubert Motions

A. Legal Standard

Expert opinion testimony is permitted if “the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue.” Fed. R. Evid. 702(a). A trial judge’s role as gatekeeper is to ensure expert testimony “is not only relevant, but reliable.” *Daubert v. Merrell Dow Pharms. Inc.*, 509 U.S. 579 (1993). In determining reliability, the Court may consider:

(1) whether a theory or technique has been or can be tested; (2) “whether the theory or technique has been subjected to peer review and publication;” (3) the technique’s “known or potential rate of error” and “the existence and

maintenance of standards controlling the technique's operation;" and (4) whether a particular technique or theory has gained general acceptance in the relevant scientific community.

United States v. Williams, 506 F.3d 151, 160 (2d Cir.2007) (quoting *Daubert*, 509 U.S. at 593–94). However, determining reliability is a “flexible inquiry” and these factors “do not constitute a definitive checklist or test,” nor will they all be applicable in every case. See *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150 (1999).

Ultimately, “in analyzing the admissibility of expert evidence, [this Court] has broad discretion in determining what method is appropriate for evaluating reliability under the circumstances of each case.” *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 265 (2d Cir. 2002). A “minor flaw” in reasoning or “slight modification” of an otherwise reliable method, will only require exclusion “if the flaw is large enough that the expert lacks good grounds for his or her conclusions.” *Id.* at 267 (quoting *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 746). This is not an exacting standard and “accords with the liberal admissibility standards of the federal rules and recognizes that our adversary system provides the necessary tools for challenging reliable, albeit debatable, expert testimony.” *Id.*; see also *Daubert*, 509 U.S. at 596 (“Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.”).

In the instant motion “the scope of the *Daubert* analysis is cabined by its purposes at this stage: the inquiry is limited to whether or not the expert reports are admissible to establish the requirements of Rule 23.” *Chen-Oster v Goldman, Sachs & Co.*, 114 F. Supp. 3d 110, 114 (S.D.N.Y. 2015); see also *In re Air Cargo Shipping Servs. Antitrust Litig.*, 2014 WL

7882100, at *43 (E.D.N.Y. Oct. 15, 2014) adopted by, 2015 WL 5093503 (E.D.N.Y. July 10, 2015) (“At the class certification stage, however, the expert testimony must simply provide a reliable basis upon which to determine that the putative class's claims are best served by class treatment.”). In this analysis, the court’s focus “must be solely on principles and methodology, not on the conclusions that they generate.” *Daubert*, 509 U.S. at 595.

B. Nettles Report

As an initial matter, the Court denies Plaintiffs’ motion to preclude Apple’s rebuttal expert report by Dr. Staroswiecki at the class certification stage. However, the Court does note Plaintiffs’ concern regarding a serious mischaracterization made by Dr. Staroswiecki regarding Dr. Nettles’ findings. In doing so, Staroswiecki inserted bracketed language into Nettles’ report that entirely transforms its original meaning:

Dr. Nettles admits that, “. . . the evidence described above [referring to everything in his report before paragraph 200] from the testing of the plaintiffs’ iPhone 4S device and backups **does not support drawing a well-grounded conclusion in either direction . . .**” (Nettles, at ¶ 200) (emphasis added). Stated otherwise, Dr. Nettles concedes that his opinions based on his testing and analysis cannot be used to prove what he refers to as a slowdown.

(Dkt. No. 110-35, ¶ 28) (brackets and emphasis in original.) Nettles certainly makes no such concession. The phrase, “the evidence described above,” clearly and unequivocally refers only to Nettles’ testing of Plaintiffs’ devices and backups, not to “everything in his report before paragraph 200.” Without brackets, the sentence reads: “Because the evidence described above *from the testing of the Plaintiffs’ iPhone 4S devices and backups* does not support drawing a well-grounded conclusion in either direction. . . .” (Dkt. No. 94-4, ¶

200) (emphasis added.) Supporting the obvious and plain meaning of this text, just several paragraphs prior, Nettles concluded that testing of Plaintiffs' devices, like the testing of their backups, was of limited utility because they could not run iOS 7 or 8 for comparison. (Dkt. No. 94-4, ¶¶ 193, 197.)

How Staroswiecki derived from this statement that Nettles chose to undermine every conclusion he had previously made up to that point in a throw away sentence is beyond the comprehension of this Court. Whether Staroswiecki's statement was a failure of basic reading comprehension, lapse in judgment, or worse, it certainly calls into question the objectivity of Apple's expert and the care with which he reviewed Nettles' work. Staroswiecki makes this argument twice in his report and given the chance to correct his error at deposition, chose to double down. (Dkt. No. 110-33, 17-18.) Apple's own insistence that this was "a fair characterization of what Dr. Nettles wrote," is equally troubling. (Dkt. No. 111-3, 22.)

i. Qualifications and Relevance

Apple attempts to cast Nettles as unqualified to provide testimony because he is not an expert in "overall user experience." (Dkt. No. 117-4, 16.) They argue because Plaintiffs seek to prove that class members "share a common experience as to the effect of iOS 9 on the iPhone 4S," Nettles must be an expert on "user experience" specifically in order to comment. (Dkt. No. 117-4, 16.) First, this ignores the fact that Plaintiffs have offered two experts. Dr. Nettles was retained specifically to testify as to the technological performance of iPhones running various versions of iOS, which he is perfectly qualified to do. Dr. Groehn, an economist and Plaintiffs' damages expert, will analyze Dr. Nettles

findings as to the value consumers place on the alleged defect. Second, even without Dr. Groehn's testimony, Nettles is qualified to testify as to a "common experience" of potential class members to the extent that the shared experience is owning an iPhone 4S with degraded performance. At no point in his report does Nettles venture outside of his lane of expertise.

In a similar vein, Plaintiffs argue that Nettles' testimony regarding speed, or "latency," are irrelevant, because they don't answer the ultimate question of whether Apple's claim that iOS 9 would "enhance performance" of Plaintiffs' iPhones was misleading. (Dkt. No. 117-4, 17.) Apple argues that iOS 9 improved user experience in a variety of ways, such as advancements to Siri, typing assistance, map improvements, and "expanded emoji support for the keyboard." (Dkt. No. 95-2, 6.) Thus, Apple argues, even if there was a slowdown, that doesn't necessarily mean that overall user experience was not enhanced, and thereby Nettles' testimony as to speed is irrelevant.

Apple's argument fails as a matter of logic. While it is indeed possible that users could deem their phones "enhanced" despite a small-scale slowdown in light of other improvements, it is also entirely possible that a slowdown could be so serious that it renders any and all other improvements meaningless. For example, suppose an individual takes their car to an auto shop for upgrades and upon return it is unable to go faster than 20 miles per hour. The shop may have installed a new sound system, GPS, and leather interior, but the car would largely be useless to the owner. Plaintiffs' theory, as the Court understands it, is just that: despite whatever professed improvements iOS 9 brought to their iPhones, it slowed them down to the point that those benefits were

meaningless or outweighed. Whether such a slowdown exists and its degree have yet to be determined, but Nettles' testimony is clearly relevant.

ii. Reliability

While iPhones are highly complex machines, the bulk of Nettles' methodology is relatively straightforward. Nettles' compares the speed of various iPhone functions on all iterations of iOS beginning with the first version of iOS 7 and ending with the last version of iOS 9. The data comes primarily from two sources: [REDACTED] and Dr. Nettles' independent testing. At this stage, the Court does not consider the conclusions that Nettles has presented, but only whether his methodology is sound and capable of showing common proof. *Daubert*, 509 U.S. at 595; *Chen-Oster*, 114 F. Supp. 3d at 114.

[REDACTED] Nettles isolates and compares the speed of various iPhone functions across versions of iOS. He then calculates a host of different statistical metrics to interpret the data, primarily presenting his findings using medians. Apple contends that Dr. Nettles' focus on medians renders his methodology unreliable because it ignores variances. (Dkt. No. 117-4, 24-25.) Apple suggests that Plaintiffs are attempting to treat the class "as a large, unified group that suffered a uniform, collective injury" in order to mask instances of individuals that suffered no injury. *See Broussard v. Meineke Discount Muffler Shops, Inc.*, 155 F.3d 331, 343 (4th Cir. 1998). Apple goes so far as to conclude, "the Supreme Court has decisively rejected methods which uses

‘average[s]...to arrive at class recovery – without further individualized proceedings.’” (*Id.*) (quoting *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338 (2011)).

Apple’s reading of Supreme Court precedent is incorrect. “*Wal-Mart* does not stand for the broad proposition that a representative sample is an impermissible means of establishing classwide liability.” *Tyson Foods, Inc. v. Bouaphakeo*, 136 S. Ct. 1036, 1048 (2016). In ruling against a categorical ban on representative or statistical evidence in class actions, the Supreme Court clarified that “[i]ts permissibility turns not on the form a proceeding takes—be it a class or individual action—but on the degree to which the evidence is reliable in proving or disproving the elements of the relevant cause of action.” *Id.* at 1046.

Nettles found that [REDACTED] outliers that inaccurately skew other metrics and presented his findings using medians because they “are less sensitive to outliers.” (*Id.* at ¶ 86.) Nettles explains that the outliers exist because [REDACTED]

[REDACTED] (*Id.*) For example, Nettles found entries of [REDACTED] [REDACTED] neither of which are realistic results and would inaccurately skew the data. (*Id.* at ¶¶ 93-94.) Indeed, Apples representatives confirmed the existence of these errors and that they could stem from a number of different causes. (Dhar Tr. at 172:24-173:10, 179:4-18.) Nettles accounted for outliers because, based on experience and testimony from Apples’ representative, he believed them to be the result of errors, not accurate though outlying results.

Furthermore, Nettles did not only calculate medians, but calculated a host of metrics, like the mean, minimum, maximum, and standard deviation. (*Id.*) While he states that medians are the most accurate measure in his opinion, his conclusions are based upon all these metrics. (*Id.*) Thus the Court finds that Nettles' consideration of medians is not improper, particularly in light of the fact that he relies on and presents a number of different metrics, and his skepticism of outliers in this data set is well-reasoned and consistent with Apples' own description of the data. *See In re Paoli*, 35 F.3d at 746 (holding that a "slight modification" of an otherwise reliable method, will only require exclusion "if the flaw is large enough that the expert lacks good grounds for his or her conclusions"). Should Apple believe that the outliers were improperly excluded through the focus on medians, "our adversary system provides the necessary tools for challenging reliable, albeit debatable, expert testimony." *Amorgianos*, 303 F.3d at 265.

Next, Apple argues through Dr. Staroswiecki, that Dr. Nettles misunderstands the significance of [REDACTED] and therefore his conclusions are faulty. (Dkt. No. 110-35, ¶ 257.) Staroswiecki states [REDACTED] is not intended to be representative of a user's experience and many of the functions being tested cannot be translated to a real-world experience. (*Id.*) Staroswiecki's point is taken, however, the Court must rule on whether Nettles' methodology can yield common proof of an iOS 9 Slowdown, not if his preliminary conclusions are entirely accurate at this stage. *Daubert*, 509 U.S. at 595.

This attack from Apple is questionable given that Dr. Nettles has been entirely forthcoming about these features of his analysis, primarily stemming from Apple's

failure to produce requested discovery. (Dkt. No. 94-4, ¶¶ 59, 76, 106, 249.) While some of [REDACTED] analysis may be irrelevant to actual user experience, the Court understands from Nettles analysis and Staroswiecki's critiques, that much of it is relevant. The key question moving forward, then, is which data points are relevant and which are not—information that can be gleaned from more complete discovery.

Importantly, Nettles does not claim that his preliminary analysis [REDACTED] alone is sufficient to establish common proof of a slowdown. [REDACTED]

[REDACTED] However, Nettles points out that “they are very useful in diagnosing that a problem exists and in helping to pinpoint where the problem lies.” (*Id.* at ¶ 106.) Accordingly, Nettles conducts his own testing on “high level tasks that a user might perform when using an app,” to further investigate the findings from his [REDACTED] analysis. (*Id.* at ¶ 143.)

In Nettles' own testing, he measures and directly compares the speed of various iPhone functions across different iOS iterations using a 30 frame per second video recording. (Dkt. No. 94-4, ¶ 159.) It is hard to fathom a more reliable method for measuring the existence of an alleged software slowdown than by timing various iPhone functions and comparing the results across iOS versions. The Court does note Apple's argument that every iPhone will perform differently depending on how it is used, and therefore Nettles testing is not representative of every potential class members' phone. This may be true, but the argument is inapplicable because Nettles' controlled testing

conditions, if anything, would *understate* the impact of an alleged slowdown as compared to real world conditions. (Dkt. No. 94-4, ¶¶ 215-219.) Nettles' testing conditions are designed to detect performance degradation on phones in ideal or close to ideal operating conditions. That certain class members could experience worse performance degradation based on the individual use patterns of their phones is no defense.

Apple further argues that Nettles' independent testing is not reliable because he tested too few versions of iOS 9 and took too few measurements to come to a significantly valid conclusion. (Dkt. No. 117-4, 10.) Again, Nettles immediate task is not to demonstrate the unequivocal existence of a slowdown but whether one can be demonstrated through common proof. Nettles preemptively acknowledges these exact shortcomings of his preliminary testing and explains the steps he would take at the merits stage to solidify his methodology. (Dkt. No. 94-4, ¶¶ 251-254.) These steps include repeating individual measurements to take advantage of statistical analysis, extending testing to all versions of iOS 7, 8, and 9, and expanding the number of applications tested, including third-party applications if possible. (Dkt. No. 94-4, ¶¶ 252-254.)

Apple contends that Nettles has "done nothing more than identify possible approaches and assert that they will work in this case." *Weiner v. Snapple Beverage Corp.*, 2010 WL 3119452, at *9 (S.D.N.Y. Aug. 5, 2010). Apple goes on to state that Nettles' opinion is based on nothing but "subjective belief and speculation." (Dkt. No. 117-4, 20.) This is a drastic mischaracterization. Apple may disagree with Nettles' findings, but they are based on the comparison of hundreds, if not thousands, of actual measurements of time. His proposed methodological changes are not theoretical but rather scaled-up

versions of testing he has already performed and thus demonstrated the feasibility of. The Court sees no reason to doubt Dr. Nettles' ability to implement these changes at the merits stage. Accordingly, the Court finds that Nettles has presented a methodology that is capable of showing common proof of the existence of a slowdown of iPhone 4S devices attributable to iOS 9. Specifically, the expanded independent testing he has outlined supplemented by further refinement of his [REDACTED] analysis, iOS Bug Reports, iOS Beta Testing reports, and Apple Customer Complaint reports, are in aggregate sufficient to demonstrate whether the alleged defect exists. Dr. Nettles report is relevant, reliable, and admissible for the purpose of class certification. Apple's motion to exclude his opinions and testimony is denied.

C. Groehn Report

Apple seeks to exclude the opinions and testimony of Dr. Groehn on the grounds that his conjoint analysis is unreliable and his alternative damages theories are outside the scope of his expertise. While Apple makes some minor criticisms of Groehn's lack of experience in certain fields related to technology, it does not expressly challenge his qualifications to offer his instant opinion. Apple contends that Groehn's conjoint analysis is unreliable because he ignores supply-side considerations in his analysis, committed errors in his survey design, and that his conclusions don't follow from his findings. The Court will consider the admissibility of Groehn's alternative damages theories before addressing Apple's primary arguments.

First, Dr. Groehn's single paragraph regarding statutory damages available in this case is excluded. While there is no risk of this Court substituting its legal analysis of the

NYGBL with Groehn's three sentence summary, Apple is technically correct that such a comment is outside of Groehn's area of expertise and unhelpful to the trier of fact in this instance. *See* Fed. R. Evid. 702(a). However, this exclusion is by no means a ruling on the accuracy of Groehn's statement or the use of statutory damages to calculate class-wide damages.

Second, the Court denies Apple's request to exclude Groehn's opinion as to replacement cost theory. While he is indeed commenting on evidence submitted by Apple, he is more than qualified to give his opinion on this excel sheet comprising market data. He is not simply "parroting" a number as Apple suggests, but filtered a larger dataset to find and report this figure. Accordingly, Groehn's opinion as to his replacement cost theory is not excluded. *See Scott v. Chipotle Mexican Grill, Inc.*, 315 F.R.D. 33, 45 (S.D.N.Y. 2016) ("An expert also may offer commentary on documents in evidence if the expert's testimony relates to...drawing inferences that would not be apparent without the benefit of experience or specialized knowledge.") (citations and quotations omitted).

i. Supply-Side Consideration in Conjoint Analysis

The parties' dispute over the proper consideration of supply-side variables in conjoint analysis is not novel. Rather, it is a question that has garnered considerable debate in the federal courts. *Compare In re MyFord Touch Consumer Litig.*, 291 F. Supp. 3d 936, 969-72 (N.D. Cal. 2018) (allowing expert's conjoint analysis as a measure of class damages) *with In Re General Motors LLC Ignition Switch Litigation*, 407 F.Supp.3d 212 (SDNY Aug. 2019) (rejecting expert's conjoint analysis as a measure of class damages).

The parties' respective arguments in this case largely track those made on both sides of this issue. Apple argues that "Dr. Groehn's conjoint analysis concerns only demand, not supply," and his "failure to take into consideration Apple's willingness to supply iOS 9 to iPhone 4S users in the actual and but-for worlds renders his opinions inadmissible." (Dkt. No. 117-2, 16.) Apple further argues it is unreliable because it "did not include competitor pricing, and did not analyze how Apple's behavior would have changed in a but-for world." (*Id.* at 6.)

However, Apple's "criticism of [Groehn]'s model perhaps rests on a misunderstanding of what it purports to do." *In re Dial Complete Mktg. & Sales Practices Litig.*, 320 F.R.D. 326, 335 (D.N.H. 2017) (admitting expert's conjoint analysis as a measure of class damages). Groehn's analysis measures "the difference in the willingness-to-pay of the marginal consumer in the actual world and the but-for world," where consumers are aware of the defect. (Dkt. No. 94-4, ¶ 35.) His analysis finds a percentage decrease in value that is "equivalent to the difference between the market price in the actual world and the price required to clear as much of the market in the but-for world as possible." (*Id.*) Groehn explains that "[t]he shape of the supply curve, or the intersection of the supply and demand curve, and hence the market equilibrium in the but-for world, are irrelevant to determining the compensation required to shift the but-for demand vertically so that it intersects with the supply curve in the actual market equilibrium." (*Id.*) Put more simply, Groehn does not ignore supply-side variables, but assumes supply remains constant in the hypothetical world in which Apple disclosed the alleged defect to consumers—an assumption that has been accepted by numerous federal courts. *See*

e.g., *In re Dial*, 320 F.R.D. 326; *In re MyFord Touch Consumer Litig.*, 291 F. Supp. 3d at 969-72 (holding expert's assumption that supply was fixed was reliable and certifying class); *Davidson v. Apple, Inc.*, 2018 WL 2325426, at *62-63 (N.D. Cal. May 7, 2018) (same).

Apple essentially argues a different approach is required to accurately determine loss of value. This approach measures the difference in market equilibriums in both the actual and hypothetical worlds. (Dkt. No. 117-2, 6.) Determining the actual market equilibrium—the intersection of a product's supply and demand curve—of an iPhone 4S with a publicly known software slowdown would indeed require additional consideration of supply-side factors (i.e. determining how Apple would behave in a world in which the alleged slowdown of the iPhone 4S was known to consumers). While this Court understands Apple's position as a matter of economic theory, this approach is unsuited to measure damages in the instant case. For example, Apple argues that “in the but-for world, Apple could continue to offer iOS 9 for free knowing that fewer people would upgrade (one rational decision) or simply not make the upgrade available to iPhone 4S owners (another rational decision).” (Dkt. No. 117-2, 17.) The latter “rational decision” particularly highlights the inadequacy of Apple's model. As noted in *MyFord Touch*, “[a]ssuming that fewer consumers were injured in the hypothetical world than were injured in the real world runs the risk of undercompensating the real-world injured consumers.” 291 F. Supp. 3d at 971; *see also In re Dial*, 320 F.R.D. at 336 (explaining that an approach identical to Apple's “can be expected to describe a price for the product at a point on the quantity sold axis below (perhaps significantly) the point that represents the actual number of offending products sold to class consumers in the actual market.”). By

its own admission, the analysis Apple proposes could very plausibly lead to a but-for world in which they have not provided *any* defective products to consumers. Such an outcome would be entirely divorced from reality in contrast to Plaintiffs' model which, while may be imperfect, "at least tethers it to a functioning market and thus to the product's fair market value." *Saavedra v. Eli Lilly & Co.*, 2014 WL 7338930, *4 (C.D. Cal. Dec. 18, 2014).

To be sure, the model Apple proposes is often the proper way to measure damages. However, when a product's defect transforms it into a product that is not sold on the market, it is exceedingly difficult, and maybe impossible, to know what its true market value is. As the *In Re GM* court explains, this contrasts with a case in which a beverage is deceptively labeled as "100% Juice," when in reality the product contains only 50% juice. *See* 407 F.Supp.3d at 239. This is because beverages that contain 50% juice are regularly sold on the market and thus the mislabeled product's value can easily be determined. However, cars with defective airbags and phones with software slowdowns are not sold as such and therefore no real market data generally exists as to their value.

In his report, Groehn explains that he chose not to use such a model because "[n]o smartphone has been sold with an explicit description of a defect similar to the one under consideration in this case." (Dkt. No. 94-4, at ¶ 42.) Accordingly, Groehn chose conjoint analysis to measure Plaintiffs' damages because it is "ideally suited to model the demand for products in different configurations and the implicit price of attributes that cannot be observed in the market." (Dkt. No. 94-4, at ¶ 47.) This Court agrees that that conjoint analysis is a suitable model for measuring damages in this case and "the fact that a fixed

number of [devices] were in fact sold (and thus a fixed number of consumers were potentially harmed) merits assuming that the size of the class is the same in both the hypothetical and real worlds and assessing damages on that basis.” *MyFord Touch*, 291 F. Supp. 3d at 971. The model Groehn proposes “is not only tethered to the real and stable market” but “would seem to capture the full measure of damages suffered by consumers who actually bought the allegedly misrepresented product.” *In re Dial*, 320 F.R.D. at 336-37. For all these reasons, the Court finds that Groehn’s consideration of supply-side factors does not run afoul of *Daubert*.

ii. Survey Design

Apple further argues that Groehn’s methodology is unreliable because of flaws in his survey design. Specifically, Apple claims that Groehn: “(1) forced respondents to focus on a feature that his own analysis demonstrated was all but irrelevant in the real world, (2) contained unclear and subjective words and concepts that not even he could describe, (3) omitted critical information, and (4) otherwise failed to meet accepted principles of survey design.” (Dkt. No. 117-2, 7.)

“Each of these arguments ‘ultimately go to the weight, not the admissibility, of [Dr. Groehn’s] testimony and are fodder for cross-examination, not exclusion.’” *In re Scotts EZ Seed Litig.*, 2017 WL 3396433, at *8 (S.D.N.Y. Aug. 7, 2017) (quoting *In re Gen. Motors LLC Ignition Switch Litig.*, 2017 WL 2664199, at *2 (S.D.N.Y. June 20, 2017)). While Groehn’s decisions can and should be subject to challenge through cross examination, none of Apple’s arguments render his survey design inherently unreliable for purposes

of ruling on class certification. His decision making is well-reasoned and thoroughly explained throughout his report.

For example, Apple argues that “Groehn’s pilot survey demonstrated that respondents placed almost *no value* on future updates, yet his conjoint survey focused to such a great extent on this update that his results ascribed almost 10% of the purchase price of an iPhone 4S.” (Dkt. No. 117-2, 21) (emphasis in original). This argument is unconvincing because, as explained by Groehn, this attribute did not just describe future software updates (which respondents cared very little about) but pertained to device reliability (which respondents rated very highly in the pilot survey). (Dkt. No. 94-4, ¶ 71.) With this understanding, the conjoint survey results are unsurprising as opposed to a result of focalism, as Apple suggests. The Court also notes that Apple argues against itself here. Throughout this litigation, Apple touts the “undeniable performance benefits” that iOS 9 software update brings, (Dkt. No. 95-2, 26), yet here seeks to undercut Plaintiffs’ argument by suggesting consumers do not care about software updates. Indeed, this finding tracks with Plaintiffs’ position that consumers would weigh the negative impact of a significant software slowdown more than the benefits of a software update.

Apple also contends that Groehn should have included the attributes “brand” and “reliability” in his conjoint survey because the pilot survey demonstrated consumers care greatly about them. But Groehn gave persuasive reasons for excluding these attributes. Groehn omitted “brand” because it “will not be varied in the conjoint study” and omitted “reliability” because it is “hard to measure objectively” and “connected to the defect at issue.” (Dkt. No. 94-4, ¶ 71.) Apple’s criticism of Groehn’s decision to use current market

prices and current smartphone attributes, as opposed to attributes from when the iPhone 4S was on the market, fail for the same reason. Apple may disagree with these decisions but Groehn has “good grounds for his...conclusions” and Apple’s criticisms fall far short of requiring exclusion. *See Amorgianos*, 303 F.3d at 267.

Similarly, Apple’s arguments with the exact language used by Dr. Groehn do not merit disqualification under *Daubert*. Apple argues that Groehn “did not give a complete or precise description of the product or alleged defect.” (Dkt. No. 117-2, 21.) According to Apple the description was incomplete for, *inter alia*, failing to include “revolutionary and obviously relevant features of the iPhone 4S: Siri, a new chipset, and a full HD Display.” (*Id.* at 22.) But it is not at all clear, nor does Apple explain, why these features “obviously” merit inclusion in the survey. Moreover, Apple argues in the immediate paragraph prior that the survey was not objective because it obviously described an iPhone (*Id.*) Thus, Apple inconsistently argues that the survey should not identify iPhone-specific attributes but that it should also include “revolutionary,” and thereby identifiable, iPhone traits like Siri.

That is not to say Apple’s critiques are entirely meritless. Groehn’s survey required numerous subjective determinations that can be properly challenged through cross examination. Groehn acknowledges that conjoint surveys must describe the product’s relevant attributes in a way that will be “understandable to the average consumer,” and thus by their nature cannot include all information (Dkt. No. 94-4, ¶ 79.) However, at this stage, the Court need not find that Groehn’s survey design was perfect, but whether his methodology is “admissible to establish the requirements of Rule 23.” *Chen-Oster v*

Goldman, Sachs & Co., 114 F. Supp. 3d 110, 114 (S.D.N.Y. 2015). Apple's motion to exclude Dr. Groehn's opinions and testimony is denied.

III. Class Certification

A. Legal Standard

Class certification is governed by Federal Rule of Civil Procedure 23. *See* Fed. R. Civ. P. 23. A party seeking class certification must first satisfy all prerequisites under Rule 23(a), namely, "(1) the class is so numerous that joinder of all members is impracticable; (2) there are questions of law or fact common to the class; (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class; and (4) the representative parties will fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a). In addition, the Second Circuit has recognized an "implied requirement of ascertainability" under Rule 23. *Brecher v. Republic of Argentina*, 806 F.3d 22, 24 (2d Cir. 2015). Upon meeting all the requirements of Rule 23(a), a plaintiff must then satisfy at least one provision of Rule 23(b). *See Comcast Corp. v. Behrend*, 569 U.S. 27, 27 (2013).

These requirements are not mere pleading standards but must be met with evidentiary proof. *See id.* at 33. A district court must conduct a rigorous analysis to determine that the prerequisites of Rule 23(a) are satisfied. *See Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338, 351 (2011). While this rigorous analysis may overlap somewhat with the merits, a court may not "engage in free-ranging merits inquiries at the certification stage." *Amgen Inc. v. Conn. Ret. Plans & Tr. Funds*, 568 U.S. 455, 465–66 (2013). Merits questions may be considered only if "they are relevant to determining whether the Rule 23 prerequisites for class certification are satisfied." *Id.* at 466.

Here, Plaintiffs seek class certification under Rule 23(b)(2) for injunctive relief and Rule 23(b)(3) for monetary damages. The specific requirements of Rule 23(a), Rule 23(b)(2), and Rule 23(b)(3) are discussed in turn.

B. Rule 23(a)

i. Numerosity

Class certification is appropriate only if “the class is so numerous that joinder of all members is impracticable[.]” Fed. R. Civ. P. 23(a)(1). Although practicability depends on “the circumstances surrounding a case, not on mere numbers,” *Robidoux v. Celani*, 987 F.2d 931, 936 (2d Cir. 1993), numerosity is presumed if the putative class has more than forty members. *See Consolo Rail Corp. v. Town of Hyde Park*, 47 F.3d 473, 483 (2d Cir. 1995). Here, the number of current and former iPhone 4S owners who downloaded iOS 9 in New York and New Jersey is roughly [REDACTED] making joinder of all members impracticable. (*See* Dkt. No. 94-2, at 15.)

ii. Commonality

Rule 23(a)(2) requires the party seeking class certification to establish that “there are questions of law or fact common to the class[.]” Fed. R. Civ. P. 23(a)(2). A mere showing that the class members “suffered a violation of the same provision of law” is insufficient. *Dukes*, 564 U.S. at 350. Instead, a plaintiff must show that “the class members have suffered the same injury” such that a class-wide proceeding is capable of generating “common answers apt to drive the resolution of the litigation.” *Id.* Differences in the individual circumstances of the class members will not bar a finding of commonality as

long as their “injuries derive from a unitary course of conduct by a single system.” *Marisol A. v. Giuliani*, 126 F.3d 372, 377 (2d Cir.1997).

Apple contends that commonality is lacking because Plaintiffs have not shown that the putative class members have suffered the same, or any, injury. (*See* Dkt. No. 95-2, at 19.) As part of this argument, Apple claims that Plaintiffs are unable to demonstrate that iOS 9 did not “enhance performance” of the iPhone 4S or that all class members experienced the same performance degradation of their devices. (*Id.* at 19-20.) Apple further argues that Plaintiffs cannot establish all class members were exposed to the same misrepresentation or omission and “whether any alleged ‘slowdown’ was omitted or disclosed depends on each user’s individual experience.” (*Id.*)

First, it is irrelevant to class certification, whether all class members experienced the exact same injury after downloading iOS 9. *See Kurtz v. Kimberly-Clark Corp.*, 321 F.R.D. 482, 549 (E.D.N.Y. 2017) (finding the question of whether the allegedly defective product worked “for some individuals goes solely to the merits; it has no relevance to the class certification issue” (quoting *Rikos v. Procter & Gamble Co.*, 799 F.3d 497, 519 (6th Cir. 2015))). As discussed *supra*, Dr. Nettles, presents a sound methodology to determine whether the iOS 9 slowdown exists in every iPhone 4S device that downloaded iOS 9 and whether subsequent iOS 9 updates fixed the problem. *See* Section II.B. *supra*. Nettle’s findings do not turn on individual usage of class member devices but rather how the software impacts performance of the iPhone 4S in ideal or close to ideal conditions. *Id.* Thus, while variations exist in how class members might use their devices and experience the alleged slowdown, they do not defeat commonality because the existence of a class-

wide performance degradation is a common question and subject to common proof. *See Marisol A.* 126 F.3d at 376 (finding “[t]he commonality requirement is met if plaintiffs’ grievances share a common question of law or of fact”).

As to common exposure to a misrepresentation or omission, Apple contends that only [REDACTED] of class members downloaded iOS 9 in the first week it was released and were thus exposed to the “enhanced performance” language. (Dkt. No. 95-2, 28.) They argue that class members who downloaded later iterations of iOS 9 were exposed to different language in their download flows depending on which version they downloaded. This argument mischaracterizes the breadth of misrepresentation that Plaintiffs are alleging. While there are some differences in exposure to Apple’s exact descriptions of iOS 9, this does not defeat commonality.

Apple does not contest that all class members were directly prompted on their devices to download iOS 9. Nor does Apple contest Plaintiffs’ contention that class members would “continue to receive these notifications unless they chose to download the update.” (Dkt. No. 94-2, 3.). Apple’s own marketing materials demonstrate the degree to which the iPhone hardware and software are intertwined and the importance Apple places on software updates. *See* SAC at ¶¶ 33-38. Before even considering the exact language that class members were exposed to, one could reasonably infer that the act of repeatedly prompting class members to download software carries an implicit representation that said software would improve or at the very least maintain performance of one’s device.

The fact that all iPhone 4S users were regularly prompted to download iOS 9 meaningfully differentiates this case from the traditional deceptive advertising cases Apple relies on. *See e.g., Loreto v. Procter & Gamble Co.*, 2013 WL 6055401 (S.D. Ohio Nov. 15, 2013). In *Loreto*, the court found that individual inquiries as to whether each class member was exposed to deceptive claims about vitamin C would predominate because the “millions of consumers who purchased the Products and never saw the statement could not have suffered an injury as a result of the statement.” *Id.* at * 5. In that case, the language at issue only appeared on the company’s website for a short time and only a couple thousand putative class members—a small fraction of the total class—were believed to have seen it. Here, putative class members did not merely choose iOS 9 off a supermarket shelf on a whim but were directly prompted to download it on their devices by Apple. While the technological nuances of this case do not necessarily mirror traditional deceptive advertising cases, there is no reason to think such behaviors are not covered by the broad remedial purposes of the NYGBL and NJCFA. *See Blue Cross & Blue Shield of N.J., Inc. v Philip Morris USA Inc.*, 3 N.Y.3d 200, 205 (N.Y. Ct. App. 2004) (“As we have previously noted, the scope [NYGBL 349] is intentionally broad, applying to virtually all economic activity.”) (citations and quotations omitted); *Furst v. Einstein Moomjy, Inc.* 182 N.J. 1, 11-12 (N.J. Sup. Ct. 2004) (“The [NJCFA] is remedial legislation that we construe liberally to accomplish its broad purpose of safeguarding the public.”).

Yet even ignoring this context and only considering the language putative class members were exposed to, commonality would not be defeated. The Court rejects Apple’s argument that some class members may have not seen the software description

in their download flows and were thus not “exposed” to a software description. Holding otherwise “would impermissibly read a seeing and a reliance requirement into the statute.” *Hasemann v. Gerber Prods. Co.*, 331 F.R.D. 239, 266-67 (E.D.N.Y. 2019). While class members may have received different software descriptions for the later versions of iOS 9, they were still exposed to *some* description of iOS 9. Plaintiffs claim that all these “statements assured consumers that the updates would improve their devices” *and*, most importantly, failed to notify users of the risk of performance degradation. (*See* Dkt. Nos. 96-9, 11: 94-2, 4.) The question of whether these statements were materially misleading or omitted a description of the alleged slowdown is certainly subject to common proof. Only twelve iterations of iOS 9 with corresponding software descriptions were released and Apple’s records indicate which versions each potential class member downloaded. (Dkt. No. 94-4, Ex. F, Ex. J.) If necessary, the class can easily be divided into subclasses based on what information individuals were exposed to, though doing so at this stage would be premature.

iii. Typicality

Rule 23(a)(3) demands that “the claims or defenses of the representative parties are typical of the claims or defenses of the class.” Fed. R. Civ. P. 23(a)(3). The commonality and typicality requirements “tend to merge” such that similar considerations inform the analysis for both prerequisites. *Dukes*, 564 U.S. at 378, n.5; *See Marisol A.*, 126 F.3d at 376. To meet the typicality requirement, a plaintiff’s claim must be “based on the same legal theory and arise from the same practice or course of conduct” as the other class members’ claims. *Dupler v. Costco Wholesale Corp.*, 249 F.R.D. 29, 38 (E.D.N.Y. 2008). When class

members and their representatives are affected by the same unlawful conduct, “the typicality requirement is usually met irrespective of minor variations in the fact patterns underlying individual claims.” *Robidoux*, 987 F.2d at 936-37. The specific facts from which the claims arise need not be identical; rather, the nature of the named plaintiffs’ claim must be the same. See *Gary Plastic Packaging Corp. v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 903 F.2d 176, 180 (2d Cir. 1990) (holding that “the mere existence of individualized factual questions with respect to the class representative’s claim will not bar class certification”).

Apple argues not only that Plaintiffs’ experiences are different from that of the putative class members, but their experiences are also not typical of each other. (See Dkt. No. 95-2, at 21.) Apple contends that Plaintiffs’ devices were not operating on the same version of iOS before downloading iOS 9 and they did not all download the same subversions of iOS 9. (See *id.*) Apple further argues that Plaintiffs used their iPhones in different ways and complain of different injuries to their devices. (See *id.* at 21–22.)

Apple’s contention that differences among Plaintiffs’ experiences with their devices and iOS 9 bar them from class certification is inconsistent with this circuit’s case law. See *Robidoux*, 987 F.2d at 936-37; *Gary Plastic Packaging Corp.* 903 F.2d at 180. Plaintiffs’ claims—(1) Apple’s descriptions of iOS 9 were materially misleading; (2) Plaintiffs and the putative class members were misled into downloading iOS 9 onto their iPhone 4S devices; and (3) Plaintiffs and the putative class members suffered an injury as iOS 9 significantly slowed down their devices (see Dkt. No. 94-2, at 10–12, 17)—are typical of those of the putative class members because they arise from Apple’s single course of

allegedly unlawful conduct. Thus, the slight variations in the named plaintiffs' experiences are irrelevant and the typicality requirement is satisfied.

iv. Adequacy of Representation

Rule 23(a)(4) requires that "the representative parties will fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a)(4). A district court must determine "whether: 1) plaintiffs' interests are antagonistic to the interest of other members of the class and 2) plaintiffs' attorneys are qualified, experienced, and able to conduct the litigation." *Baffa v. Donaldson, Lufkin & Jenrette Sec. Corp.*, 222 F.3d 52, 60 (2d Cir. 2000). Only a fundamental conflict of interest between the putative class and its representative will preclude a finding of adequacy. *See Sykes v. Mel S. Harris & Assocs. LLC*, 780 F.3d 70, 88 (2d Cir. 2015). The class representative "must be part of the class and possess the same interest and suffer the same injury as the class members." *Amchem Prod., Inc.*, 521 U.S. 591, 594 (1997). Class certification is improper where the class representative is subject to unique defenses that will become the focus of the litigation to the detriment of absent class members. *See Gary Plastic Packaging Corp.*, 903 F.2d at 180.

Citing *Falcon v. Philips Elecs. N. Am. Corp.*, 304 F. App'x 896, 897 (2d Cir. 2008), Apple argues that Williams and Lerman cannot adequately represent the class. (*See* Dkt. No. 95-2, at 22.) Apple contends that Williams is not an adequate class representative because she failed to preserve her device as critical evidence. (*See id.*) Apple claims that because Williams had a different experience after downloading iOS 9 than did the other plaintiffs, her device was crucial to Apple's defense against her claim. (*See id.* at 23.) In

addition, Apple argues that Lerman and Williams cannot represent the class because they have not proved that they personally purchased their iPhone 4S devices. (*See id.*)

As an initial matter, it is undisputed that Plaintiffs' counsel is qualified to litigate this case. As to the Rule 23(a)(4) issues in dispute, the Court finds Apple's arguments to be without merit. The holding of *Falcon*, which Apple relies on, does not turn on the mere fact that the plaintiff did not personally purchase the defective product at issue or that the defective product was disposed of prior to class certification. Rather, the court in *Falcon* found that the plaintiff could not adequately represent the putative class because she was "subject to unique defenses which threaten to become the focus of the litigation[.]" *Falcon*, 304 F. App'x at 897 (2d Cir. 2008).

Since Apple "stopped selling the iPhone 4S in September 2014" and "iOS 9 [is] no longer available," (Dkt. No. 95-2, at 4, 42), it is probable that most of the putative class members no longer possess their iPhone 4S devices. Therefore, if disposal of the iPhone 4S device is a defense for Apple, it is likely to not be a unique defense against Williams' claim, but rather, an issue common amongst the proposed class. Furthermore, there is no evidence whatsoever that Williams disposed of her device in bad faith. Rather, the record shows she traded it in prior to learning she would be a plaintiff in the instant action in order to get a discount on her much-needed replacement device (Dkt. No. 96-9, 6.) In any event, the absence of Williams' device is immaterial to class certification because Plaintiffs have presented a methodology that can measure the existence of the alleged slowdown across all iPhone 4S devices. (*See supra* Section II.B.)

Contrary to Apple's claims, Lerman and Williams have produced sufficient evidence that they purchased their devices for purposes of class certification. (See Dkt. No. 96-1, at 7.) Williams' [REDACTED] indicate she purchased her device for [REDACTED] [REDACTED] (Dkt. No. 94-2, 10.) Lerman produced text messages demonstrating that he paid his brother-in-law for his device. (Dkt. No. 94-4, Ex. V.) District courts in the Second Circuit have held that physical proof of purchase, such as receipt or credit card statement, is not necessary for class certification in consumer protection cases, nor is privity between buyer and seller. *See Mosely v. Vitalize Labs, LLC*, 2015 WL 5022635, *5 (E.D.N.Y. Aug. 24, 2015) (listing cases and holding that despite the lack of physical proof of purchase, a reasonable juror could conclude that the plaintiff purchased the defective product at issue); *Kurtz*, 321 F.R.D. at 539 (finding "rigorous insistence on proof-of-purchase is counterproductive"); *Szymczak v. Nissan N. Am.*, 2011 WL 7095432, *15 (S.D.N.Y. Dec. 16, 2011) ("privity between a buyer and seller is not required for a Section 349 claim").

Finally, Plaintiffs have shown their commitment to represent the Class and that their interests are aligned with those of the putative class members. (See Dkt. No. 94-2, at 18-19.) They have devoted significant time on this case, responding to extensive written discovery requests, and sitting for lengthy depositions. (*Id.*) For all these reasons, Plaintiffs meet the adequacy requirement.

v. Implied Requirement of Ascertainability

The Second Circuit has recognized an "implied requirement of ascertainability" in Rule 23. *Brecher*, 806 F.3d at 24. A class must be "defined by objective criteria" so that the

court can determine whether a particular individual is a member without holding “a mini-hearing.” *Id.* at 24. It is not necessary that class members be identified prior to certification, but “the exact membership of the class must be ascertainable at some point in the case.” *In re Methyl Tertiary Butyl Ether Prod. (“MTBE”) Liability Litig.*, 209 F.R.D. 323, 337 (S.D.N.Y. 2002) (internal quotation marks omitted). Lack of physical proof of purchase, such as receipt, alone does not bar a finding of ascertainability. *See In re Scotts EZ Seed Litig.*, 304 F.R.D. at 407 (finding the proposed class definition consisting of New York and California purchasers of a product containing misleading claims on its package “is sufficiently specific to satisfy the ascertainability requirement,” even without class-wide proof of purchase).

Here, the Class consists of “iPhone 4S owners from New York and New Jersey who downloaded iOS 9 onto their devices from a version of iOS 7 or iOS 8.” (Dkt. No. 94-2, 34.) Members of this class are easily ascertainable [REDACTED]

[REDACTED] Apple argues that the class definition is overbroad for including iPhone 4S owners who did not suffer an injury. (*See* Dkt. No. 95-2, at 18.) The Court rejects this argument for two reasons. First, neither the Second Circuit nor the Supreme Court has ever held that class certification is barred because a putative class may include a certain number or percentage of uninjured class members. *See In re Restasis (Cyclosporine Ophthalmic Emulsion) Antitrust Litig.*, No. 18-MD-2819 (NG) (LB), 2020 WL 2555556, at *11 (E.D.N.Y. May 5, 2020). In *Tyson Foods, Inc. v. Bouaphakeo*, 136 S. Ct. 1036, 1044 (2016), the Supreme Court affirmed class certification when the proposed class contained over 200

uninjured class members. Moreover, “district courts in this Circuit have certified classes that likely or certainly contained uninjured class members.” *In re Restasis*, 2020 WL 2555556, at *10 (E.D.N.Y. May 5, 2020) (listing cases). Second, Plaintiffs have demonstrated a methodology capable of proving whether the iOS 9 slowdown is inherent to all iPhone 4S devices that updated to iOS 9 and a method for proving iPhone 4S ownership for each putative class member in New York and New Jersey. (See Dkt. No. 94-2 at 33.) In sum, Plaintiffs have satisfied Rule 23’s implied ascertainability requirement.

C. Predominance and Superiority Under Rule 23(b)(3)

To obtain class certification under Rule 23(b)(3), Plaintiffs must show that “common questions of law or fact ‘predominate’ over purely individual questions and that a class action is ‘superior’ to other methods of resolving the dispute.” *In re Am. Int’l Grp., Inc. Sec. Litig.*, 689 F.3d 229, 239 (2d Cir. 2012). To satisfy the predominance requirement, a plaintiff must show that “questions common to the class predominate, but “not that those questions will be answered, on the merits, in favor of the class.” *Amgen*, 568 U.S. at 459. A plaintiff is not required “to prove that each element of her claim is susceptible to classwide proof.” *Id.* at 469. An individual question is one that requires evidence that varies from class member to class member, whereas a common question is one that is susceptible to generalized class-wide proof. See *Tyson Foods, Inc.*, 136 S. Ct. at 1045.

The key common issues in this litigation are, *inter alia*: 1) whether Apple’s descriptions and omissions regarding iOS 9 were materially misleading and 2) whether

the existence of the iOS 9 slowdown can be established by common evidence. *See In re Scotts EZ Seed Litig.*, 304 F.R.D. at 405, 409 (finding the questions of whether defendant's product description was false or misleading and whether plaintiffs suffered economic harm as a result of defendant's false advertising were "apt to drive the resolution" of NYGBL §§ 349 and 350 claims). Apple has not raised any individual inquiries that might predominate over these questions. At the very most, Apple has raised issues that may pertain to large subclasses that can be easily managed through standard case management tools if necessary. *See In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 141 (2d Cir. 2001) (listing various case management tools that may be used to address individualized damages issues that arise in class litigation).

i. Elements of the NYGBL §§ 349 & 350 Claims

To bring a *prima facie* claim under NYGBL §§ 349 or 350, a plaintiff must satisfy three elements: (1) defendant engaged in consumer-oriented conduct; (2) the conduct was materially misleading; and (3) plaintiff suffered an injury as a result of that deceptive act or practice. *See Maurizio v. Goldsmith*, 230 F.3d 518, 521 (2d Cir. 2000) (noting the legal standards for making a *prima facie* claim under NYGBL §§ 349 and 350 are the same). To prove that the defendant's conduct is consumer-oriented, the plaintiff "must demonstrate that the acts or practices have a broader impact on consumers at large." *Oswego Laborers' Local 214 Pension Fund v. Marine Midland Bank, N.A.*, 85 N.Y.2d 20, 25 (1995). "Misleading" has an objective definition "under which the alleged act must be likely to mislead a reasonable consumer acting reasonably under the circumstances." *Cohen v. JP Morgan Chase & Co.*, 498 F.3d 111, 126 (2d Cir. 2007) (internal quotation marks omitted).

Apple asserts that in order to satisfy Rule 23(b)(3)'s predominance requirement, Plaintiffs have to prove that each element of their claims are subject to common proof. (See Dkt. No. 35, at 24.) The Supreme Court has expressly rejected such claim. See *Amgen*, 568 U.S. at 469 (finding "Rule 23(b)(3), however, does not require a plaintiff seeking class certification to prove that each elemen[t] of [her] claim [is] susceptible to classwide proof." (alterations in original) (international quotation marks omitted)). Nevertheless, Plaintiffs have done so for each element of their NYGBL claim.

First, Apple does not dispute that the challenged practices are consumer oriented. (See *id.* at 5 n.2.) Second, Plaintiffs have shown that whether Apple's misrepresentations and omissions are materially misleading is a common question that predominates. (See *supra* Section III.B.) Sections 349 and 350 do not require individual determination of how a particular advertisement affected each putative class member. See *Hasemann*, 331 F.R.D. at 266–67. Apple's argument that individualized inquiries are required to determine what a class member saw before downloading iOS 9 impermissibly reads "a seeing and a reliance requirement into" NYGBL §§349 and 350. *Id.* at 267; (holding that the NYGBL does not require a plaintiff to prove that all putative class members were uniformly exposed to the alleged misrepresentations made by the defendant) (class certification granted); see also *Stutman*, 95 N.Y.2d at 29 (holding that "reliance is not an element of a § 349 claim"). Under the NYGBL, Apple's representations are analyzed under an objective standard in which "the alleged act must be likely to mislead a reasonable consumer acting reasonably under the circumstances." *Cohen v. JP Morgan Chase & Co.*, 498 F.3d 111, 126 (2d Cir. 2007) (internal quotation marks omitted).

Third, Plaintiffs have shown that whether iOS 9 caused iPhone 4S devices to slow down is a common question that predominates. (*See supra* Section III.B.2). Apple unpersuasively argues that individualized inquiries are required to prove causation under NYGBL §§ 349 and 350 because many factors can affect the iPhone’s performance. However, as already discussed at length, Plaintiffs’ expert has presented a methodology to demonstrate whether iOS 9 caused all class member devices to perform more slowly. (*See supra* Section II.B.; Section III.B.2). The record also suggests that Apple’s knowledge of the iOS 9 slowdown is subject to common proof. (Dkt. No. 94-2, at 13, 23.)

Lastly, Apple’s argument that Plaintiffs have failed to provide an “objective meaning” for the term “enhanced performance” has no bearing on the predominance requirement. *Hughes v. Ester C Co.*, on which Apple relies, correctly holds “it is not necessary at [the class certification] stage to demonstrate that the allegedly false and misleading representation carries a uniform definition, or that all potential class members were, in fact, misled by the representation.” 317 F.R.D. 333, 345 (E.D.N.Y. 2016). Plaintiffs have shown that common questions predominate in each element of their claim under NYGBL §§ 349 and 350. Thus, Plaintiff’s NYGBL claim meets Rule 23(b)(3)’s predominance requirement.

ii. Elements of the NJCFA Claims

Under the NJCFA, a plaintiff must satisfy three elements to establish a *prima facie* claim: (1) unlawful conduct by defendant; (2) an ascertainable loss by plaintiff; and (3) a causal relationship between the unlawful conduct and the ascertainable loss. *See Bosland v. Warnock Dodge, Inc.*, 197 N.J. 543, 557 (2009). An unlawful practice is “any

unconscionable commercial practice, deception, fraud, false pretense, false promise, [or] misrepresentation . . . in connection with the sale or advertisement of any merchandise . . .” NJCFA § 56:8-2. An ascertainable loss is defined as a “quantifiable and measurable loss,” rather than one that is merely theoretical. *See Thiedemann v. Mercedes-Benz USA, LLC*, 183 N.J. 234, 248 (2004). For affirmative acts of unlawful conduct, intent is not an element. *See Cox v. Sears Roebuck & Co.*, 138 N.J. 2, 17–18 (1994). For omissions, intent is an element and plaintiffs must allege that the defendant acted with knowledge. *Id.*

Plaintiffs’ NJCFA claim is subject to common proof for largely the same reasons as their NYGBL claims with the exception of what Plaintiffs must show with respect to damages, which is discussed in the following section. *See Ebin v. Kangadis Food Inc.*, 297 F.R.D. 561, 568 (S.D.N.Y. 2014) (holding that “[e]lements of NYGBL § 349 are very similar to the NJCFA” and that common questions predominated for both). Thus, Plaintiff’s NJCFA claim meets Rule 23(b)(3)’s predominance requirement.

iii. Damages

The Supreme Court has held that at the class certification stage, any damages model supporting a finding of predominance must match the plaintiff’s theory of liability. *See Comcast* 569 U.S. 35. However, the Second Circuit clarified that *Comcast* “did not hold that a class cannot be certified under Rule 23(b)(3) simply because damages cannot be measured on a classwide basis.” *Roach v. T.L. Cannon Corp.*, 778 F.3d 401, 407 (2d Cir. 2015). At the class certification stage, a plaintiff is only required to “show that their damages stemmed from the defendant’s actions that created the legal liability.” *Sykes*, 780 F.3d at 88 (holding that “individualized monetary claims belong in Rule

23(b)(3)” even after *Comcast*) (quoting *Dukes*, 564 U.S. at 362 (2011)). Plaintiffs present three methods for measuring class-wide damages. (See Dkt. No. 94-2, at 29–31.)

First, NYGBL §349(h) provides for the recovery of “actual damages or fifty dollars, whichever is greater.” Similarly, NYGBL §350-e provides for the recovery of “actual damages or \$500, whichever is greater.” Thus, the class-wide damages calculation under NYGBL §§ 349 and 350 is simply the \$50 or \$500 statutory amount for each affected iPhone 4S device.

Apple argues that the New York Plaintiffs cannot simply rely on the NYGBL’s statutory damages to show that damages are measurable on a class-wide basis because they have failed to demonstrate a common injury to be redressed by that amount. To be sure, the mere existence of statutory damages alone is insufficient to satisfy the predominance requirement. “Plaintiffs need to first show that the class members have been injured or harmed in the same way.” *Pagan v. Abbott Labs., Inc.*, 287 F.R.D. 139, 149 (E.D.N.Y. 2012). Here, Plaintiffs have alleged a common injury along with a methodology to determine its existence accompanied by preliminary proof that they in fact were similarly injured. (See *supra* Section II.B.2). Once Plaintiffs demonstrate a common injury, the availability of statutory damages may be used to measure class-wide damages. See *Sykes*, 780 F.3d at 87 (noting that “[i]t is not disputed that statutory damages under [NY]GBL § 349 can be assessed on the basis of common proof, as they are capped at \$50”); *In re Amla Litig.*, 328 F.R.D. 127, 136 (S.D.N.Y. 2018) (finding that statutory damages provided by the NYGBL §349 is sufficient to “establish[] that damages are capable of measurement on a classwide basis” (quoting *Comcast*, 569 U.S. at 35)).

Plaintiffs' second theory of damages is Dr. Groehn's conjoint analysis. Groehn's analysis uses "purchase price as a proxy to understand how consumers value products and their constituent attributes." (Dkt. No. 94-4, ¶ 48.) His methodology yields a specific percentage decrease in value stemming from the defect at issue as described by Dr. Nettles. (Dkt. No. 94-2 at 27-28.) As no statutory damages are available under the relevant NJCFA section, the survival of Plaintiffs' New Jersey claim depends on the ability to define an "ascertainable loss that is quantifiable or measurable." *Theidman*, 183 N.J. at 248.

Apple argues that Plaintiffs' posit a "price premium theory" that has been rejected by New Jersey courts as proof of ascertainable loss or causation in CFA claims. (See Dkt. No. 95-2 at 36.) This Court disagrees. The New Jersey Supreme Court case cited by Apple in support of their argument specifically rejects a "price-inflation" theory that is inapplicable to the instant case. See *Dugan v. TGI Fridays, Inc.*, 171 A.3d 620, 639 (N.J. 2017) (emphasis added). In *Dugan*, the plaintiffs alleged that a restaurant chain, "by virtue of its policy of leaving beverage prices off its menu...was able to inflate beverage prices across its market without reducing customer demand." *Id.* at 641. The court found that the "price-inflation theory" failed to "globally establish [ascertainable loss and causation] for the vast and varied class of restaurant customers." *Id.* at 642. Here, Plaintiffs allege a specific and actual injury to all class members through the alleged slowdown of their devices after Plaintiffs had already purchased them. The damages model they present estimates the value of this injury.

As discussed *supra*, Dr. Groehn's analysis measures the devices diminution in value as a result of the defect on a class-wide basis. (See *supra* Section II.C.) This

diminution-in-value theory based on conjoint analysis is distinguishable from the cases cited by Apple and compatible with the NJCFA. *See Theidman*, 183 N.J. at 248 (“In cases involving...misrepresentation...a demonstration of loss in value will suffice to meet the ascertainable loss hurdle and will set the stage for establishing the measure of damages.”) *Strzakowski v. Gen. Motors Corp.*, No. CIV.A. 04-4740, 2005 WL 2001912, at *7 (D.N.J. Aug. 16, 2005) (“Plaintiff is claiming ascertainable loss in the form of diminution in value, a theory which the [New Jersey Supreme Court] acknowledged could satisfy the CFA's loss requirement”). The New Jersey Supreme Court has held that an “estimate of damages, calculated within a reasonable degree of certainty will suffice to demonstrate an ascertainable loss.” *Theidman* 183 N.J. at 249. At this stage, Dr. Groehn’s conjoint analysis sufficiently matches the plaintiff’s liability claims under the NYGBL and NJCFA. (*See* Dkt. No. 94-2, at 1–3.)

Last, Plaintiffs propose a replacement cost theory that measures class-wide damages by the amount that each class member would have been forced to pay to obtain an iPhone free of the iOS 9 Slowdown (i.e. the iPhone 5). (*See id.* at 31.) Plaintiffs argue that the replacement cost theory represents “the cheapest option . . . to avoid the slowdown of the iPhone 4S after the update to iOS 9.” (*Id.*) Alternatively, a replacement cost theory can measure “the actual amount that Class Members paid to replace their defective iPhone 4S devices.” (*Id.*)

However, Plaintiffs’ replacement cost theory does not match their theory of liability. Any newer iPhone model comes with better hardware and software than the pre-iOS 9 iPhone 4S. Awarding plaintiffs with the cost of a better device would

impermissibly provide the class with a windfall. Cf. *United States v. City of New York*, 681 F. Supp. 2d 274, 293 (E.D.N.Y. 2010) (finding “it is sensible” to avoid “providing a windfall to certain victims at the expense of others” in an employment discrimination class certification action); *Skeen v. BMW of N. Am., LLC*, 2016 WL 4033969, at *10 (D.N.J. July 26, 2016) (finding it unreasonable to give a windfall to class members harmed by a defective clutch by requiring compensation “for the purchase of ‘replacement’ vehicles”). Therefore, only Plaintiffs’ statutory damages and conjoint analysis theories satisfy Rule 23(b)(3)’s predominance requirement.

iv. Superiority

Rule 23(b)(3) provides four factors relevant to the superiority analysis:

“(A) the interest of members of the class in individually controlling the prosecution or defense of separate actions; (B) the extent and nature of any litigation concerning the controversy already commenced by or against members of the class; (C) the desirability or undesirability of concentrating the litigation of the claims in the particular forum; and (D) the difficulties likely to be encountered in the management of the class action.”

The Second Circuit has held that “failure to certify an action under Rule 23(b)(3) on the sole ground that it would be unmanageable is disfavored and should be the exception rather than the rule.” *In re Visa Check/Mastermoney Antitrust Litig.*, 280 F.3d at 140. Instead, district courts should use a variety of case management tools to address potential manageability issues while proceeding within the class action context. *See id.* at 141.

Here, all four factors favor class action. First, assuming treble damages are not awarded, the maximum amount of damages any New York class member could receive is \$500, and considerably lower for the New Jersey class according to Groehn’s conjoint

analysis. See NYGBL § 350-e. This weighs in favor of class action because “the costs of bringing individual actions outweigh the expected recovery.” *In re U.S. Foodservice Inc. Pricing Litig.*, 729 F.3d 108, 130 (2d Cir. 2013) (affirming class certification). Second, this court is not aware of any other litigation against Apple commenced by parties who are part of the Class. Third, this forum is appropriate for adjudicating the proposed class action since plaintiffs and putative class members are residents of New York and New Jersey. See *Sykes*, 780 F.3d at 82. (noting that when determining whether a particular forum is appropriate for adjudicating a class action, “courts have considered when a particular forum is more geographically convenient for the parties”). Lastly, a class action proceeding will be manageable because the elements of Plaintiffs’ claims are subject to common proof and common issues predominate over individual issues. (See *supra* Section II.B.2; II.C).

Apple contends that individualized inquiries concerning “whether a plaintiff has mitigated” damages predominate and render class certification inappropriate. However, mitigation defenses generally go to the calculation of damages, not the question of class certification. See *In re Visa Check/Mastermoney Antitrust Litig.*, 192 F.R.D. 68, 86 (E.D.N.Y. 2000), *aff’d sub nom. In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124 (2d Cir. 2001) (finding “the presence of individualized defenses, such as mitigation, going only to damages are generally regarded as no barrier to class certification”).

D. Injunctive Relief Under Rule 23(b)(2)

Rule 23(b)(2) permits class certification when “the party opposing the class has acted or refused to act on grounds that apply generally to the class, so that final injunctive

relief or corresponding declaratory relief is appropriate respecting the class as a whole[.]” Fed. R. Civ. P. 23(b)(2). In addition, the Advisory Committee Notes provide that “[Rule 23(b)(2)] is intended to reach situations where a party has taken action or refused to take action with respect to a class, and final relief of an injunctive nature or of a corresponding declaratory nature, settling the legality of the behavior with respect to the class as a whole, is appropriate.” Fed. R. Civ. P. 23. The Supreme Court has held that “Rule 23(b)(2) applies only when a single injunction or declaratory judgment would provide relief to each member of the class[.]” and “does not authorize class certification when each class member would be entitled to an individualized award of monetary damages.” *Dukes*, 564 U.S. at 360–61. To qualify for injunctive relief, a plaintiff must show that the threat of future injury is “actual and imminent, not conjectural or hypothetical” (quoting *Summers v. Earth Island Institute*, 555 U.S. 488, 493 (2009)); *Nicosia v. Amazon.com, Inc.*, 834 F.3d 220, 239 (2d Cir. 2016) (holding that “[p]laintiffs lack standing to pursue injunctive relief where they are unable to establish a ‘real or immediate threat’ of injury”).

The Second Circuit has found that consumers harmed by product misrepresentation “are not likely to encounter future harm of the kind that makes injunctive relief appropriate” because (1) consumers are unlikely to purchase the same product again once they become aware that they have been deceived and (2) consumers do not have the kind of “perpetual relationship” with the producer of a consumer product that is “typical of plaintiffs and defendants in Rule 23(b)(2) class actions.” *Berni v. Barilla S.p.A.*, 964 F.3d 141, 147–48 (2d Cir. 2020). *Berni* also expressly instructed that

“courts cannot create [an equitable exception to Rule 23(b)(2)] to achieve a policy objective” 964 F.3d at 148.

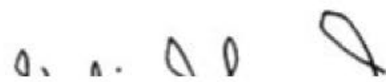
It is undisputed that all of the named plaintiffs are no longer users of the iPhone 4S and that iPhone 4S devices are no longer for sale on the market. Like the putative class in *Berni*, Plaintiffs’ proposed class is defined by past activity and they have not shown that future injury is imminent or probable. Therefore, the Court finds that Plaintiffs do not have standing to seek class certification under Rule 23(b)(2).

IV. Conclusion

For the foregoing reasons, the Court finds that Plaintiffs have met all the requirements under Rule 23(a) and satisfied the predominance and superiority requirements under Rule 23(b)(3). Accordingly, the Plaintiffs’ Motion for Class Certification is **GRANTED** for the following two classes for monetary relief only: all individuals and entities in New York (Class 1) and New Jersey (Class 2) who currently own or have owned an iPhone 4S that was updated to any version of iOS 9 from any version of iOS 7 or iOS 8. All Daubert motions by Plaintiffs and Defendants are **DENIED**.

SO ORDERED.

Dated: October 6, 2020
Brooklyn, New York


signed Sterling Johnson, Jr.,
Sterling Johnson, Jr., U.S.D.J.